UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,120	07/23/2003	Pierre Lebee	15437-0619	9082

		EXAMINER
7590	10/18/2004	BARBEE, MANUEL L

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| ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 10/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/626,120	LEBEE ET AL.
	Examiner	Art Unit
	Manuel L. Barbee	2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _08 June 2004_.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-35_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-35_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _23 July 2003_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some *   c) ☐ None of:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public
> use or on sale in this country, more than one year prior to the date of application for patent in the United
> States.

2.   Claims 1-11, 14-23 and 26-33 are rejected under 35 U.S.C. 102(b) as being

anticipated by Gregory et al. (WO 0075783 A1).

With regard to repetitively invoking an operating system to create a process with

a thread and executing a test function repetitively in the thread, as shown in claims 1,

14 and 26, Gregory et al. teach executing threads to test an operating system (page 16,

line 5 - page 17, line 20). With regard to repeating these steps until operating system

resources are exhausted, as shown in claims 1, 14 and 26, Gregory et al. teach

stressing the system to the limit and possibly bringing down a file system (page 10, lines

1-11).

With regard to initializing at least one test function, as shown in claims 2, 15 and

27, Gregory et al. teach testing the operating system with test files and multi-threaded

concurrent stressing (page 10, lines 1-11). With regard to a user selecting a number of

process, as shown in claims 3, 4, 16, 17, 28 and 29, Gregory et al. teach allowing the

user to control the number of cycles and threads of testing by stopping an infinite cycle

or configuring the test using data files (page 13, line 20 - page 14, line 21). With regard

to creating at least a second thread, as shown in claims 5, 18 and 29, and creating the

second thread by a configuration file using the operating system, as shown in claims 6, 7, 19 and 20, Gregory et al. teach testing the operating system with test files and multi-threaded concurrent stressing and allowing the user to control the number of cycles and threads of testing by stopping an infinite cycle or configuring the test using data files (page 10, lines 1-11; page 13, line 20 - page 14, line 21).

With regard to a second thread being created upon a first thread request, as shown in claims 8, 21 and 30, Gregory et al. teach a main thread spawning other threads (page 17, lines 13-15). With regard to repetitively executing the test function in the first and second threads, as shown in claims 9 and 31, Gregory et al. teach cycling or looping through a test to stress a system (page 41, lines 8-12). With regard to repeating the invoking and executing to create processes with first and second threads to execute the test function parallel and repetitively, as shown in claims 10, 22 and 32, Gregory et al. teach multi-threaded concurrent stressing of the system (page 10, lines 1-11, page 13, line 20 - page 14, line 21). With regard to retrieving results of the test function, as shown in claims 11, 23 and 33, Gregory et al. teach outputting results of the tests (page 10, line 12 - page 11, line 11).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 12, 13, 24, 25, 34 and 35 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Gregory et al. in view of Morrison et al. (US Patent Application

Publication 2003/0167422).

Gregory et al. teach all the limitations of claims 1 and 5 upon which claims 12

and 13 depend, claims 14 and 18 upon which claims 24 and 25 depend and claims 26

and 29 upon which claims 34 and 35 depend. Gregory et al. do not teach deleting the

second thread invoking termination of a test function by the first thread and deleting

processes, as shown in claims 12, 13, 24, 25, 34 and 35. Morrison et al. teach ending a

process by terminating a threads and a module clean up function (par. 29; Figure 3b).

Clean up in multi-threaded computer applications generally refers to deletion of threads

that are no longer needed. It would have been obvious to one of ordinary skill in the art

at the time the invention was made to modify the operating system test function, as

taught by Gregory et al., to include module clean up, as taught by Morrison et al.,

because then unused threads and process would not have been using system

resources after when the process were no longer needed.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Rowe (US Patent No. 6,324,492) teaches server stress testing with multiple

concurrent client simulation.

Klotz et al. (US Patent Application Publication 2004/0015744) teach scalable

multithreaded network testing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manuel L. Barbee whose telephone number is 571-272-2212. The examiner can normally be reached on Monday-Friday from 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on 571-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mlb

HAL WACHSMAN
PRIMARY EXAMINER